

To: Chairperson and Authority Members

Date: January 22, 2003

From: Mehdi Morshed, Executive Director

Subject: **Agenda Item 6 — Overview of International High-Speed Rail Systems**

Discussion

High-speed train systems have been extensively proven in revenue service in Europe and Japan. This mode of transportation was first introduced in Japan in the mid-1960s. Over the years, the Japanese “Shinkansen” network has been greatly expanded and further additions are currently under construction. Other Asian nations are now pursuing high-speed train systems of their own. In Europe, high-speed train service began in France in 1981, and in Germany in 1991. High-speed trains now operate through and connect England, France, Germany, Belgium, Italy, and Spain. Ultimately there will be a fully integrated high-speed train network throughout Europe.

Background information will be provided on the development of the major international high-speed rail systems throughout the world and the expansion of these networks. Presentations will be made on the French, German, Spanish, Italian, and Japanese high-speed train systems, the new Korean high-speed train system that is about to begin operations, and the Taiwanese system under construction. The presenters will discuss the major difficulties in planning, construction, and the operations of the high-speed train systems, and suggest lessons for the development of a statewide network in California. The presentations will answer the following types of questions:

- When did the planning start for the high-speed train system?
- When did the first segment begin operations?
- Number of miles/number of trains for first segment?
- Number of miles/number of trains now? How was the system phased?
- Miles planned for construction over the next 10 years?
- How many passengers were carried during the first year of operation?
- How many passengers are being carried now annually?
- What kinds of trains are used? Who is the manufacturer of the trains?
- What was the maximum operational speed for the first segment?
- What is the maximum operational speed now?
- How was/is the system designed and constructed?
- How is the system being operated?
- What are/were the construction costs?
- What are/were the roles of the government and private sector?